

04 CO
03/09/01

#2

OIPE

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/757,716DATE: 03/22/2001
TIME: 13:27:54Input Set : A:\09757716.txt
Output Set: N:\CRF3\03222001\I757716.raw

ENTERED

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1 <110> APPLICANT: Magna, Holly
2   Schaffer, Paul
3   Lawton, Michael
4   Yocum, Sue
5   Mitchell, Peter
6   Hutchinson, Nancy
7   Murry, Lynn E.
W--> 8 <120> TITLE OF INVENTION: HUMAN NUCLEOTIDE PYROPHOSPHOHYDROLASE-2
W--> 9 <130> FILE REFERENCE: PF-0420 US
W--> 10 <140> CURRENT APPLICATION NUMBER: 09/757,716
C--> 11 <141> CURRENT FILING DATE: 2001-01-09
13 <150> PRIOR APPLICATION NUMBER: US/08/996,083
14 <151> PRIOR FILING DATE: 1997-12-22
16 <160> NUMBER OF SEQ ID NOS: 3
17 <170> SOFTWARE: FastSEQ for Windows Version 3.0
19 <210> SEQ ID NO: 1
20 <211> LENGTH: 1156
21 <212> TYPE: PRT
22 <213> ORGANISM: Homo sapiens
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25 <223> OTHER INFORMATION: Incyte Clone No.: 1388013
W--> 26 <300> PUBLICATION INFORMATION:
W--> 27 <400> SEQUENCE: 1
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31       20           25           30
32   Ala Leu Gly Leu Glu Arg Arg Ser Val Tyr Thr Gly Gln Pro Ser Pro
33       35           40           45
34   Ala Leu Glu Asp Trp Glu Glu Ala Ser Glu Trp Thr Ser Trp Phe Asn
35       50           55           60
36   Val Asp His Pro Gly Gly Asp Gly Asp Phe Glu Ser Leu Ala Ala Ile
37       65           70           75           80
38   Arg Phe Tyr Tyr Gly Pro Ala Arg Val Cys Pro Arg Pro Leu Ala Leu
39       85           90           95
40   Glu Ala Arg Thr Thr Asp Trp Ala Leu Pro Ser Ala Val Gly Glu Arg
41       100          105          110
42   Val His Leu Asn Pro Thr Arg Gly Phe Trp Cys Leu Asn Arg Glu Gln
43       115          120          125
44   Pro Arg Gly Arg Arg Cys Ser Asn Tyr His Val Arg Phe Arg Cys Pro
45       130          135          140
46   Leu Glu Ala Ser Trp Gly Ala Trp Gly Pro Trp Gly Pro Cys Ser Gly
47       145          150          155          160
48   Ser Cys Gly Pro Gly Arg Arg Leu Arg Arg Arg His Cys Pro Ser Pro
49       165          170          175
50   Ala Gly Asp Ala Cys Pro Gly Arg Pro Leu Glu Ala Gln Lys Cys Val

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53			195					200					205				
54	His	Ile	Leu	Leu	Gly	Ser	Val	Val	Thr	Pro	Ser	Gly	Gln	Pro	Leu	Leu	
55		210					215					220					
56	Gly	Ala	Arg	Val	Ser	Leu	Arg	Asp	Gln	Pro	Gly	Thr	Val	Ala	Thr	Ser	
57	225					230					235					240	
58	Asp	Ala	His	Gly	Thr	Phe	Arg	Val	Pro	Gly	Val	Cys	Ala	Asp	Ser	Arg	
59					245					250					255		
60	Ala	Asn	Ile	Arg	Ala	Gln	Met	Asp	Gly	Phe	Ser	Ala	Gly	Glu	Ala	Gln	
61				260					265					270			
62	Ala	Gln	Ala	Asn	Gly	Ser	Ile	Ser	Val	Val	Thr	Ile	Ile	Leu	Asp	Lys	
63			275					280					285				
64	Leu	Glu	Lys	Pro	Tyr	Leu	Val	Lys	His	Pro	Glu	Ser	Arg	Val	Arg	Glu	
65		290					295					300					
66	Ala	Gly	Gln	Asn	Val	Thr	Phe	Cys	Cys	Lys	Ala	Ser	Gly	Thr	Pro	Met	
67	305					310				315						320	
68	Pro	Lys	Lys	Tyr	Ser	Trp	Phe	His	Asn	Gly	Thr	Leu	Leu	Asp	Arg	Arg	
69					325					330					335		
70	Ala	His	Gly	Tyr	Gly	Ala	His	Leu	Glu	Leu	Arg	Gly	Leu	Arg	Pro	Asp	
71				340					345					350			
72	Gln	Ala	Gly	Ile	Tyr	His	Cys	Lys	Ala	Trp	Asn	Glu	Ala	Gly	Ala	Val	
73			355					360					365				
74	Arg	Ser	Gly	Thr	Ala	Arg	Leu	Thr	Val	Leu	Ala	Pro	Gly	Gln	Pro	Ala	
75		370					375					380					
76	Cys	Asp	Pro	Arg	Pro	Arg	Glu	Tyr	Leu	Ile	Lys	Leu	Pro	Glu	Asp	Cys	
77	385					390					395					400	
78	Gly	Gln	Pro	Gly	Ser	Gly	Pro	Ala	Tyr	Leu	Asp	Val	Gly	Leu	Cys	Pro	
79					405					410					415		
80	Asp	Thr	Arg	Cys	Pro	Ser	Leu	Ala	Gly	Ser	Ser	Pro	Arg	Cys	Gly	Asp	
81				420					425					430			
82	Ala	Ser	Ser	Arg	Cys	Cys	Ser	Val	Arg	Arg	Leu	Glu	Arg	Arg	Glu	Ile	
83			435					440					445				
84	His	Cys	Pro	Gly	Tyr	Val	Leu	Pro	Val	Lys	Val	Val	Ala	Glu	Cys	Gly	
85		450					455					460					
86	Cys	Gln	Lys	Cys	Leu	Pro	Pro	Arg	Gly	Leu	Val	Arg	Gly	Arg	Val	Val	
87	465					470					475					480	
88	Ala	Ala	Asp	Ser	Gly	Glu	Pro	Leu	Arg	Phe	Ala	Arg	Ile	Leu	Leu	Gly	
89					485					490					495		
90	Gln	Glu	Pro	Ile	Gly	Phe	Thr	Ala	Tyr	Gln	Gly	Asp	Phe	Thr	Ile	Glu	
91			500						505					510			
92	Val	Pro	Pro	Ser	Thr	Gln	Arg	Leu	Val	Val	Thr	Phe	Val	Asp	Pro	Ser	
93			515					520					525				
94	Gly	Glu	Phe	Met	Asp	Ala	Val	Arg	Val	Leu	Pro	Phe	Asp	Pro	Arg	Gly	
95		530					535					540					
96	Ala	Gly	Val	Tyr	His	Glu	Val	Lys	Ala	Met	Arg	Lys	Lys	Ala	Pro	Val	
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98	Ile	Leu	His	Thr	Ser	Gln	Ser	Asn	Thr	Ile	Pro	Leu	Gly	Glu	Leu	Glu	
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100	Asp	Glu	Ala	Pro	Leu	Gly	Glu	Leu	Val	Leu	Pro	Ser	Gly	Ala	Phe	Arg
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103			595					600					605			
104	Phe	Val	Asp	Pro	Arg	Asp	Leu	Thr	Ser	Ala	Ala	Ser	Ala	Pro	Ser	Asp
105		610					615					620				
106	Leu	Arg	Phe	Val	Asp	Ser	Asp	Gly	Glu	Leu	Ala	Pro	Leu	Arg	Thr	Tyr
107	625					630					635					640
108	Gly	Met	Phe	Ser	Val	Asp	Leu	Arg	Ala	Pro	Gly	Ser	Ala	Glu	Gln	Leu
109				645						650					655	
110	Gln	Val	Gly	Pro	Val	Ala	Val	Arg	Val	Ala	Ala	Ser	Gln	Ile	His	Met
111				660						665				670		
112	Pro	Gly	His	Val	Glu	Ala	Leu	Lys	Leu	Trp	Ser	Leu	Asn	Pro	Glu	Thr
113			675					680					685			
114	Gly	Leu	Trp	Glu	Glu	Glu	Ser	Gly	Phe	Arg	Arg	Glu	Gly	Ser	Ser	Gly
115		690					695					700				
116	Pro	Arg	Val	Arg	Arg	Glu	Glu	Arg	Val	Phe	Leu	Val	Gly	Asn	Val	Glu
117	705					710				715						720
118	Ile	Arg	Glu	Arg	Arg	Leu	Phe	Asn	Leu	Asp	Val	Pro	Glu	Arg	Arg	Arg
119				725						730					735	
120	Cys	Phe	Val	Lys	Val	Arg	Ala	Tyr	Ala	Asn	Asp	Lys	Phe	Thr	Pro	Ser
121				740						745				750		
122	Glu	Gln	Val	Glu	Gly	Val	Val	Val	Thr	Leu	Val	Asn	Leu	Glu	Pro	Ala
123			755						760				765			
124	Pro	Gly	Phe	Ser	Ala	Asn	Pro	Arg	Ala	Trp	Gly	Arg	Phe	Asp	Ser	Ala
125		770					775					780				
126	Val	Thr	Gly	Pro	Asn	Gly	Ala	Cys	Leu	Pro	Ala	Phe	Cys	Asp	Ala	Asp
127	785					790					795					800
128	Arg	Pro	Asp	Ala	Tyr	Thr	Ala	Leu	Val	Thr	Ala	Thr	Leu	Gly	Gly	Glu
129				805						810					815	
130	Glu	Leu	Glu	Pro	Ala	Pro	Ser	Leu	Pro	Arg	Pro	Leu	Pro	Ala	Thr	Val
131				820						825				830		
132	Gly	Val	Thr	Gln	Pro	Tyr	Leu	Asp	Arg	Leu	Gly	Tyr	Arg	Arg	Thr	Asp
133			835					840					845			
134	His	Asp	Asp	Pro	Ala	Phe	Lys	Arg	Asn	Gly	Phe	Arg	Ile	Asn	Leu	Ala
135		850					855					860				
136	Lys	Pro	Arg	Pro	Gly	Asp	Pro	Ala	Glu	Ala	Asn	Gly	Pro	Val	Tyr	Pro
137	865					870					875					880
138	Trp	Arg	Ser	Leu	Arg	Glu	Cys	Gln	Gly	Ala	Pro	Val	Thr	Ala	Ser	His
139				885						890					895	
140	Phe	Arg	Phe	Ala	Arg	Val	Glu	Ala	Asp	Lys	Tyr	Glu	Tyr	Asn	Val	Val
141			900						905					910		
142	Pro	Phe	Arg	Glu	Gly	Thr	Pro	Ala	Ser	Trp	Thr	Gly	Asp	Leu	Leu	Ala
143			915					920					925			
144	Trp	Trp	Pro	Asn	Pro	Gln	Glu	Phe	Arg	Ala	Cys	Phe	Leu	Lys	Val	Lys
145		930					935					940				
146	Ile	Gln	Gly	Pro	Gln	Glu	Tyr	Met	Val	Arg	Ser	His	Asn	Ala	Gly	Gly
147	945					950					955					960
148	Ser	His	Pro	Arg	Thr	Arg	Gly	Gln	Leu	Tyr	Gly	Leu	Arg	Asp	Ala	Arg

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149          965          970          975
150 Ser Val Arg Asp Pro Glu Arg Pro Gly Thr Ser Ala Ala Cys Val Glu
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154 Leu Val Thr Ile Met Pro Gln Gly Ser Cys Arg Arg Val Ala Val Asn
155          1010          1015          1020
156 Gly Leu Leu Arg Asp Tyr Leu Thr Arg His Pro Pro Pro Val Pro Ala
157          1025          1030          1035          1040
158 Glu Asp Pro Ala Ala Phe Ser Met Leu Ala Pro Leu Asp Pro Leu Gly
159          1045          1050          1055
160 His Asn Tyr Gly Val Tyr Thr Val Thr Asp Gln Ser Pro Arg Leu Ala
161          1060          1065          1070
162 Lys Glu Ile Ala Ile Gly Arg Cys Phe Asp Gly Ser Ser Asp Gly Phe
163          1075          1080          1085
164 Ser Arg Glu Met Lys Ala Asp Ala Gly Thr Ala Val Thr Phe Gln Cys
165          1090          1095          1100
166 Arg Glu Pro Pro Ala Gly Arg Pro Ser Leu Phe Gln Arg Leu Leu Glu
167          1105          1110          1115          1120
168 Ser Pro Ala Thr Ala Leu Gly Asp Ile Arg Arg Glu Met Ser Glu Ala
169          1125          1130          1135
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W--> 182 <300> PUBLICATION INFORMATION:

W--> 183 <400> SEQUENCE: 2

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186 acccccaccg aggagccaat ggcgactgca ctgggcctgg aaagacggtc cgtgtacacc 180
187 ggccagccct caccagccct ggaggactgg gaagaggcca gcgagtggac gtcttggttc 240
188 aacgtggacc accccggagg cgacggcgac ttcgagagcc tggctgccat ccgcttctac 300
189 tacgggccag cgcgcgtgtg cccgcgaccg ctggcgctgg aggcgcgcac cacggactgg 360
190 gccctgccgt ccgccgtcgg cgagcgcgtg cacttgaacc ccacgcgcgg cttctggtgc 420
191 ctcaaccgcg agcaaccgcg tggccgccgc tgctccaact accacgtgcg cttccgctgc 480
192 ccactagaag cctcgtgggg cgcgtggggc ccgtggggtc cctgctcggg gagctgtggg 540
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196 ctaggagcca gggctctcct gcgagaccag cctggcactg tggccaccag cgatgctcac 780
197 ggaaccttcc gggtgccctg tgtctgtgct gacagccgcg ccaacatcag ggcccagatg 840
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 PATENT APPLICATION: US/09/757,716

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202	ctggagctsc	ggggactgcg	cccagaccag	gctggcatct	accactgcaa	ggcatggaat	1140
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238	gtcactgacc	agagcccacg	cttggccaag	gagatcgcca	ttggccgctg	ctttgatggt	3300
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VERIFICATION SUMMARY

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Input Set : A:\09757716.txt

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L:9 M:283 W: Missing Blank Line separator, <130> field identifier
L:10 M:283 W: Missing Blank Line separator, <140> field identifier
L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:23 M:283 W: Missing Blank Line separator, <220> field identifier
L:26 M:283 W: Missing Blank Line separator, <300> field identifier
L:27 M:283 W: Missing Blank Line separator, <400> field identifier
L:179 M:283 W: Missing Blank Line separator, <220> field identifier
L:182 M:283 W: Missing Blank Line separator, <300> field identifier
L:183 M:283 W: Missing Blank Line separator, <400> field identifier
L:253 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:2
L:253 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:2
L:259 M:283 W: Missing Blank Line separator, <220> field identifier
L:262 M:283 W: Missing Blank Line separator, <300> field identifier
L:263 M:283 W: Missing Blank Line separator, <400> field identifier